

SALISBURY (S)

Observations on the
waters of the
Avon new-bath Spring xxx



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OBSERVATIONS
ON THE
W A T E R S
OF THE
AVON NEW-BATH SPRING
AND
LONG'S SPRING,
AT
A V O N,
LIVINGSTON COUNTY, N. Y.

BY S. SALISBURY, JR., M. D.

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W. A. T. H. E.

OF THE

NEW-BATH SPRING

LONG'S SPRING

AVON

WATER CURE

BY R. H. BATES

PRINTED BY J. H. BATES

OBSERVATIONS, &c.

THIS *Spring* was first discovered by its proprietor, Reuben K. Hickox, while digging for pure spring water. It is about thirty rods east of what is commonly called the *Upper Spring*, and but a few rods east of the Hotel of Nehemiah Houghton. The soil through which the excavation was made, is of hard blue clay, having a strong bituminous and sulphurous odour. The excavation did not descend to the bituminous shale rock, which (as has been observed in speaking of the other springs) is superincumbent upon the limestone. Large rocks, both of limestone and shale, were found imbedded in the blue hardpan. The temperature of this water is 45° Fahrenheit. Its specific gravity is 1.0067. In sensible qualities it resembles the Upper and Lower Springs, having, however, a peculiar sweetness of taste, which is sufficient to distinguish it from any of the springs in its vicinity. As it issues from the fountain it is peculiarly sparkling, emitting a large number of air bubbles. When heated for the preparation of the warm bath, it retains its clear and limpid appearance, becoming somewhat greenish like sea-water; and it is not until it cools that any film or scum is formed upon its surface. From an examination of its relative situation, I am led to infer that its source is in an entirely different direction from the others. About fifty rods east of it, in a large meadow, there are several springs, from which bubbles of inflammable air or carburetted hydrogen gas constantly arise.

Examined by the appropriate re-agents, it is found to contain

Nitrogen,

Oxygen,

Carbonic Acid,

Hydro-sulphuric Acid,

Carbonate of Lime,

Chloride of Calcium,
Sulphate of Lime,
Sulphate of Magnesia,
Sulphate of Soda,
Per-oxide of Iron.

In regard to the discovery of iron in this water, I would observe, that both the usual tests (Tincture of Galls and Ferrocyanate of Potassa) rendered its presence evident; and repeated experiments, both at the spring and at a distance, both before and after evaporation, have established the fact beyond a question. The ingredients which enter into the composition of this water, are the same as those of the other springs, with the addition of the Per-oxide of Iron; but the proportionate quantities are much larger, and are very different. Viewing an analysis of this water as highly interesting and important to the public, and believing that it possesses very active remedial powers, it is my intention, at a future time, to ascertain the exact quantities of the different substances with which it is impregnated. "The chemical agency of mineral waters," says the learned Editor of the *Medico-Chirurgical Review*, "is not to be overlooked. They contain, in all probability, many ingredients which we cannot detect, and many known agents which we cannot imitate by artificial combinations. This is proved by every day's observation. Thus, the saline, aperient materials in mineral waters, will produce ten times more effect than the identical materials artificially dissolved and commixed. The same is true with respect to the Chalybeate Springs: a grain of iron in them, is more tonic than twenty grains exhibited according to the *Pharmacopœia*."

When first drank, this water sometimes produces a slight degree of vertigo, and a sensation of warmth at the stomach: this, however, is but momentary, and soon passes off. It generally excites no unpleasant sensations; and after the stomach becomes habituated to it, one or two half-pint glasses may be taken at once, without inconvenience. Even in cases where at first it produces much nausea or vertigo, after a few trials it proves agreeable.

This water is, according to the manner in which it is used, actively cathartic, or alterative and tonic. It is highly valuable as possessing in an eminent degree the property of thoroughly evacuating the bowels, and at the same time increasing the secretions from the liver, the kidneys, and the skin. It

has been a frequent subject of complaint with visitors at these mineral springs, that the water is not sufficiently active as a cathartic; and it is certainly true, that in cases where there is a deficiency of the natural and healthy secretions, and where the digestive organs have become enfeebled and torpid from a too stimulating and luxurious diet, the remedy used should be sufficiently active in this respect, to prevent that sense of weight and distention of the stomach and bowels, which is consequent upon drinking any considerable quantity of an inoperative fluid.

From a close observation of its effects in numerous cases, during the last and the present summer, I am led to believe, that when a purgative operation is required, few medical agents are more certainly efficacious than this mineral water. Although no preparation for the use of this water is generally requisite, yet its stimulating properties render it frequently improper in inflammatory diseases; it may, therefore, often be advisable to precede its use by blood-letting, or other evacuations. I am of the opinion, however, that in general there is but little cause to fear the effects of an agent which exerts so powerful an influence upon the cutaneous and urinary secretions; and have commonly found, that any local determination induced by it, has soon passed away, and a beneficial effect has been experienced.

This water is in a degree similar to the other Avon waters, and is applicable to the same diseases generally; but from my knowledge of its chemical constitution and its effects, I am led to augur a greater efficacy in the cure of disorders of the digestive organs, arising from torpor of the *primæ viæ*, in hepatic obstructions, in affections of the glandular system, and in particular, all the varieties of scrofulous inflammation. In several disorders of females, arising from a derangement in the regular menstrual evacuation, this water must be preeminently useful.

The water of this spring is taken with the greatest advantage, at an early hour of the day, before breakfast. From a pint to a pint and a half, drank at short intervals, will in most cases be found sufficient to produce a cathartic operation. There are some persons who suffer from any considerable quantity of cold water taken into the stomach, experiencing the most distressing sensations; these should either drink it in very small quantities, or add to each draught, at the time of

drinking it, a portion of that which is heated. The best method of heating it will be, to put a bottle of the spring water, tightly corked, into hot water, until it acquires a proper temperature.

As the water is equally efficacious in the winter as in the summer months, in the cure of those diseases to which it is applicable, it is, I am informed, the design of the proprietor of this spring to be in readiness to furnish baths, *at all seasons*, to such as may require them. The proprietor, with a laudable spirit of enterprise and zeal for the accommodation of the public, has erected a large Bathing House near his spring, and promises to continue to make such improvements as will be consistent with the encouragement he receives.

"LONG'S SPRING."

THIS Spring issues from the surface of an alluvial flat, through the centre of which passes what has been called the Black Creek, a small stream, having its rise some miles south. It is about a mile, in a south-westerly direction, from the others. The temperature of this water is 45° Fahrenheit; and its taste indicates the large quantities of saline materials which enter into its composition. By an examination of this water in 1832, I found that it was made up of the same constituents as the Lower Spring, but that these were in comparatively much larger quantities. The quantity of saline matter which it contains is sufficient to require it to be classed distinct from the other springs. Although the taste of this water is at first rather disagreeable, yet the same general remark will apply to this as well as other hydro-sulphurous waters, that however nauseous at first, the palate soon becomes reconciled to them, and they become much less disagreeable by use.

A large *Boarding and Bathing House* has been recently erected at this spring, and during the last and the present season, many invalids have made use of the water. Its action upon the skin, when used as a bath, as well as some few cases

which have come to my knowledge, have induced me to believe, that by its superior efficacy in rheumatic and cutaneous diseases, it will greatly enhance the value of our mineral waters. Persons who have made use of this bath, have described the prickly sensation produced as similar to that of the stinging of small insects; and it has been observed, that the whole surface of the body becomes of a florid red color: thus manifesting the high degree of capillary excitement produced.

A number of cures of secondary syphilis and of disease produced by the use of mercury, have attracted particular attention, and must inevitably give this spring the reputation it so richly merits.

From a conversation with an invalid sufferer from rheumatism who had been cured at this spring, I learned that the quantity of water drank daily by those resorting to it, did not exceed three pints; and he had been informed by them, that a free alvine evacuation was almost invariably effected by this comparatively small quantity.

There is something deserving of notice in respect to both this and the New Bath Spring: when heated for the purpose of bathing, the waters retain their transparency, and do not become in the slightest degree turbid or milky, presenting a sufficiently clear and cleanly appearance to satisfy the most nice and fastidious lover of this luxury.

Erratum.—Page 5, 16th line from the bottom, for “*vice*,” read *vie*.

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